



Xiamen University Centenary Celebration

**International Law of the Sea: Developments, Challenges and Prospects
Panel: Latest developments of the International Law of the Sea**

Latest developments relating to the regime for the Area under Part XI of UNCLOS

Xiamen, Fujian, China (Virtual)

6 April 2021

STATEMENT

By Mr. Michael W. Lodge,
Secretary-General of the International Seabed Authority

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Greetings from Jamaica.

I wish to convey warmest greetings and congratulations from all at the International Seabed Authority on the 100th anniversary of Xiamen Daxue. It is indeed a remarkable achievement and I feel deeply honoured to have been invited to participate in these proceedings to mark your centenary.

Over the years, ISA has established a warm and cordial relationship with Xia Da, especially through collaboration with the School of Law, the South China Sea Institute and the Marco Polo-Zheng He Summer Academy. The ISA in fact supported the latter financially for several years through a grant from the ISA Endowment Fund for Marine Scientific Research.

I myself lectured at the Summer Academy a few years ago and was able to observe the enthusiasm of the students as well as the great spirit of friendship and international cooperation that is created by the unique programme offered by the Academy. I have also been delighted to visit Xia Da on several occasions and very much hope to do so again as soon as international travel becomes possible.

I must also mention the presence today of Dr Zhang Kening, former senior legal officer of the ISA from its early days, who has done so much to keep alive the spirit of cooperation between ISA and Xia Da and ensure that students under his supervision have access to the most current and up to date information about the activities of ISA.

Today I will contribute to this interesting panel on the latest developments in the international law of the sea by presenting a brief update on the latest developments relating to the regime for the Area under Part XI of UNCLOS.

We are at present at a critical stage in the evolution of ISA's activities as the custodian of the seabed beyond national jurisdiction.

As of 2021, ISA has approved 31 exploration contracts covering three different mineral resource types in the Pacific, Atlantic and Indian Oceans. Chinese entities alone have five of these exploration contracts, giving China a hugely important stake in the work of ISA.

For the past twenty-five years, the emphasis has been on exploration and the collection and analysis of data to help us better understand the quality of the mineral resources and the nature of the deep-sea environment. But some of the earlier exploration projects are becoming increasingly mature, and contractors are thinking more seriously about how to move to the exploitation phase.

To be able to move to exploitation requires five things are needed: an understanding of the marine environment and the potential impacts of mining on the environment, an understanding of the resource potential, technology, investment, and regulation. These are very much interconnected.

For instance, investment will not come unless there is proven resource potential as well as clear regulation so that contractors understand the parameters within which they can operate and can make financial decisions. Technology development requires investment but also engineers need to understand environmental conditions so that they can develop technology that avoids or minimizes environmental damage to the maximum extent possible.

More than 25 years of exploration under ISA and another 15 years before that have already given us a good understanding of the potential of marine minerals.

The resource potential of polymetallic nodules is particularly well understood. The Clarion Clipperton Zone nodule resource alone is the largest known undeveloped nickel resource on earth. Several contractors have already been able to move their resource estimates from inferred to indicated or measured status.

The marine environment is also much better described, mainly because of the consistent, long-term data collection programmes required by ISA. I would like to mention here that Chinese science and research has made an enormous contribution to our understanding of the deep sea, especially in recent years.

Beyond these factors there are also macroeconomic factors to consider. It is quite clear that meaningful progress towards electrification will increase the demand for critical minerals. For example, according to Glencore, copper demand is expected to rise to 60 million tonnes by 2050, which is double today's consumption. Nickel consumption is expected to increase to 9.2 million

tonnes from 2.5 million tonnes today. These factors are also stimulating new investment in deep sea mining as an important new source for these minerals. The critical element that is missing is regulation.

That is why the work of the Authority is focused at present on finalizing the regulations for future exploitation.

Work on the regulations has been progressing since 2014. It started with the preparation of a series of expert studies and discussion papers, followed by the development of draft regulations by the Legal and Technical Commission. At each stage of the process, stakeholder consultations were held allowing for the broadest possible public engagement and transparency. The draft regulations were submitted to the Council in 2019 and are currently undergoing detailed scrutiny. At its last meeting, in early 2020, the Council decided to establish three informal working groups to review different sections of the draft and it is expected that this work will resume as soon as the Council is able to meet again.

It is important to bear in mind that the objective of regulations is to provide the necessary level of detail to implement the provisions of Part XI and Annex III of the Convention, which already set out the legal basis and fundamental conditions on which deep sea mining in the Area may be carried out.

The draft regulations currently under consideration by the Council consist of 107 regulations, ten annexes and four appendices. They cover every aspect of the mining operation from application for approval of a plan of work for exploitation through to closure of the project and post-closure monitoring. The regulations will be supported by legally binding standards. These standards must be developed by the Legal and Technical Commission taking into account the views of recognized experts and relevant existing internationally accepted standards.

Work has already started on the development of draft standards and guidelines and several have already been issued for stakeholder consultation. More will be issued during 2021. The Authority is very much interested in broad cooperation in the development of these standards and guidelines, which is why, for example, we have already held initial discussions with ISO, in particular its technical committee on ships and marine technology, chaired by China, with a view to closer cooperation in future.

Considering the level of detail involved, there is still a lot of work to be done on the draft regulations. But the main issues fall into three groups. First, there are the financial issues.

A working group on the financial terms of contracts was launched in 2018 and much progress has been made, including the development of a comprehensive financial model of deep-sea mining and more recently a comparative study of the financial terms of land-based mining compared to deep sea mining. Based on the work done so far, the working group has narrowed down the options for a payment mechanism that would apply during the first phase of commercial mining. The suggestion is to apply a royalty based on the value of the minerals contained in the nodules at the point of their collection. Considering that there is presently no

market for nodules, it is necessary to make informed assumptions about value and profitability of mining.

There is broad agreement, therefore, that whatever system is adopted should be subject to review in the light of experience and once the Authority has received and audited all necessary information to make a continuous evaluation of the commercial benefits of the payment mechanism.

Another aspect of the financial system is the question of possible compensation to land-based mineral producers who may be adversely affected by the production of deep-sea minerals. To a great extent, this issue is already dealt with by the Convention and the 1994 Agreement, which provide that a portion of the royalties received by the Authority must be diverted to an economic assistance fund for this purpose. In 2020, at the request of the Council, the secretariat commissioned a study of the potential impact on land-based producers of seabed mineral production and the results of that study underlined the need to consider each situation on a case-by-case basis.

The administration of this system relies on the establishment of an Economic Planning Commission, which was suspended by the 1994 Agreement. It is likely that land-based producers will want to see some progress on this matter before they would be prepared to agree to the adoption of the regulations.

The second major set of issues are the environmental aspects of the regulations. Whilst there are strong views on environmental issues, the actual legal issues involved are not particularly complex. Everybody agrees on the need for strong environmental regulation. The more important issues to be discussed are how the processes for reviewing environmental impact assessments will work in practice and the respective responsibilities of the Authority and sponsoring States for managing input by external stakeholders.

Associated with environmental matters is the question of the establishment of a compensation fund for environmental damage as proposed by the Seabed Disputes Chamber in the context of the 2011 advisory opinion on responsibilities and liabilities of sponsoring States. The secretariat has recently published a study of the issues associated with such a fund, highlighting some of the important and complex legal questions that will need to be considered. It is important to emphasize, however, that the compensation fund is intended only as a fund of last resort, to be used only in the extreme situation when damages cannot be recovered from the contractor, through insurance or through mandatory environmental performance guarantees.

The third issue, which is more of a political issue, is the question of the Enterprise. In 2018, the Council authorized me to appoint a Special Representative for the Enterprise in order, amongst other things, to ensure that the Enterprise had an independent voice in the negotiation of the regulations. This was considered essential as the Enterprise would eventually be a contractor and therefore should be considered as an important stakeholder in the discussions. As exploitation becomes closer, there is even more interest in the Enterprise and the pressure to facilitate the independent functioning of the Enterprise has increased. This is not surprising, especially as some regions still do not have a full stake in exploration through sponsorship of contracts and

therefore see the Enterprise as something that is critical to ensure their full participation in the Part XI regime.

I fully expect that it will be possible to resolve these outstanding issues through a process of dialogue and negotiation. During 2020, the secretariat was able to advance a lot of the background work needed to support the work of the Council, including by preparing legal studies and reports on key issues. Unfortunately, in the absence of physical meetings, it was not possible for States to hold meaningful negotiations on the draft text of the regulations, but we hope this will be feasible soon and that all the preparatory work that has been done will help to expedite the future discussions.

As the Council works towards the adoption of the regulations, together with the associated standards and guidelines, the Authority also needs to prepare to become an effective regulator of an industrial activity. To meet the expectations of States and contractors, this will clearly involve some increase of capacity in the secretariat as well as additional resources.

In conclusion, I wish all at Ha Tai a very happy 100th anniversary and I congratulate you on all your achievements so far. I am sure that the university will observe the motto of your founder, Mr Tan Kah Kee and continue to 'pursue excellence and strive for perfection'. I also welcome increased collaboration between the Authority and Xiamen University and look forward to a long and prosperous friendship with you all.
